

FORM PTO-1390
(REV. 01-2003)

US DEPARTMENT OF COMMERCE PATENT & TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER
127589

**TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A FILING UNDER 35 U.S.C. 371**

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)
New U.S. National Stage of PCT/JP2004/014458
10/574539

INTERNATIONAL APPLICATION NO.
PCT/JP2004/014458

INTERNATIONAL FILING DATE
September 24, 2004

PRIORITY DATE CLAIMED
October 1, 2003

TITLE OF INVENTION
METHOD FOR PRESERVING ORGANIC POLYMERIC MATERIAL AND ORGANIC ELECTROLUMINESCENT DEVICE

APPLICANTS FOR DO/EO/US
Takashi SHINOHARA; Yuji SHINOHARA; Koichi TERA0

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. ☒ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
 - a. ☒ is attached hereto (required only if not communicated by the International Bureau).
 - b. ☐ has been communicated by the International Bureau.
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2))
 - a. ☐ is attached hereto.
 - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
 - c. ☒ The International Application was filed in English.
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
 - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
 - b. ☐ have been communicated by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11 to 20 below concern document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☐ A preliminary amendment.
14. ☒ An Application Data Sheet under 37 CFR 1.76.
15. ☐ A substitute specification.
16. ☒ A power of attorney and/or change of address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. ☒ International Search Report; Submission of Informal Comments.

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| U.S. APPLICATION NO. (if known) 10/574539 New U.S. National Stage of PCT/JP2004/014458 | | INTERNATIONAL APPLICATION NO. PCT/JP2004/014458 | | ATTORNEY'S DOCKET NUMBER 127589 | |
| 21. <input checked="" type="checkbox"/> The following fees are submitted: | | | | CALCULATIONS PTO USE ONLY | |
| BASIC NATIONAL FEE (37 CFR 1.492(a)): \$ 300.00 | | | | \$300.00 | |
| SEARCH FEE (37 CFR 1.492(b)(1)-(3)): International preliminary examination report or written opinion prepared by the USPTO as IPEA or ISA and favorable as to novelty, inventive step, and industrial applicability for all claims presented in the application entering the national stage \$ 0.00 International search fee (37 CFR 1.445(a)(2)) paid to USPTO as ISA \$ 100.00 International search report provided to USPTO no later than the time at which the search fee is paid \$ 400.00 All situations not provided for above \$ 500.00 | | | | \$400.00 | |
| EXAMINATION FEE (37 CFR 1.492(c)(1)-(2)): International preliminary examination report or written opinion prepared by the USPTO as IPEA or ISA and favorable as to novelty, inventive step, and industrial applicability for all claims presented in the application entering the national stage \$ 0.00 All situations not provided for above \$ 200.00 | | | | \$200.00 | |
| Surcharge of \$130.00 for furnishing the search fee, the examination fee or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)). | | | | \$ | |
| TOTAL PAGES OF APPLICATION OVER 100 (- 100) | 0 ÷ 50 | = 10 | x 250 = | \$0 | |
| †round up to next integer | | | | | |
| CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE | \$ | |
| TOTAL CLAIMS | 17 - 20 | = 0 | x 50.00 = | \$0 | |
| INDEPENDENT CLAIMS | 1 - 3 | = 0 | x 200.00 = | \$0 | |
| MULTIPLE DEPENDENT CLAIM(S)(if applicable) | | | | + 360.00 = | \$ |
| TOTAL OF ABOVE CALCULATIONS = | | | | \$900.00 | |
| <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2. | | | | \$ | |
| SUBTOTAL = | | | | \$900.00 | |
| Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). | | | | \$ | |
| TOTAL NATIONAL FEE = | | | | \$900.00 | |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + | | | | \$ | |
| TOTAL FEES ENCLOSED = | | | | \$900.00 | |
| | | | | Amount to be refunded: | \$ |
| | | | | charged: | \$ |
| a. <input checked="" type="checkbox"/> Check No. 178463 in the amount of \$900.00 to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$_____ to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>15-0461</u> . A duplicate copy of this sheet is enclosed. d. <input type="checkbox"/> Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. | | | | | |
| NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status. | | | | | |
| SEND ALL CORRESPONDENCE TO: OLIFF & BERRIDGE, PLC Customer Number: 25944 | | | | | |
| Date <u>April 3, 2006</u> | | | NAME: <u>James A. Oliff</u> REGISTRATION NUMBER: <u>27,075</u> NAME: <u>Joel S. Armstrong</u> REGISTRATION NUMBER: <u>36,430</u> | | |

10/574539

JAP15 Rec'd PCT/PTO 03 APR 2006

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Takashi SHINOHARA et al.

Attn: PCT Branch

Application No. New U.S. National Stage of PCT/JP2004/014458

Filed: April 3, 2006

Docket No.: 127589

For: METHOD FOR PRESERVING ORGANIC POLYMERIC MATERIAL AND
ORGANIC ELECTROLUMINESCENT DEVICE

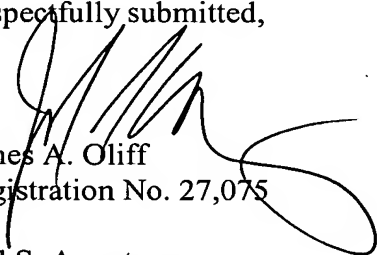
**SUBMISSION OF INFORMAL COMMENTS IN RESPONSE TO PCT WRITTEN
OPINION**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Attached hereto is a copy of Informal Comments in Response to PCT Written
Opinion that were filed in the PCT application.

Respectfully submitted,


James A. Oliff
Registration No. 27,075

Joel S. Armstrong
Registration No. 36,430

JAO:JSA/per

Date: April 3, 2006

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

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|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461 |
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March 17, 2006

PCT Operations Division
The International Bureau of WIPO
34 Chemin des Colombettes
1211 Geneva 20
Switzerland

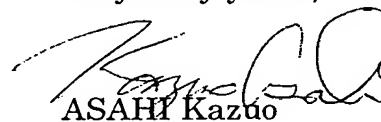
Informal Comments

International Application No.: PCT/JP2004/014458
International Filing Date: 24.9.2004
Applicant: SEIKO EPSON CORPORATION
4-1, Nishishinjuku 2-chome, Shinjuku-ku, Tokyo 163-0811 JAPAN
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Nishi-Shinbashi Noa Bldg. 4th Floor
18-9, Nishi-Shinbashi 1-chome, Minato-ku, Tokyo 105-0003 JAPAN
Telephone No.: 03-3595-3251
Applicant's or Agent's File reference: EPS-54-PCT

Dear Sir:

The Applicant, who received the International Search Report relating to the above-identified International Application, files Informal Comment attached hereto.

Very truly yours,


ASAHI Kazuo

Attachment:

- | | |
|-----------------------------------|----------|
| (1) Informal Comments | 2 sheets |
| (2) BAYTRON "Product Information" | 2 sheets |

Applicant's Comments on an Informal Basis
on the Written Opinion of the International Searching Authority

With regard to the written opinion of the International Searching Authority in the separate sheet, we would ask to consider the following points.

(1) In the written opinion, the Examiner says that "The product information of Baytron P reports that Baytron P comprises 0.9wt% of organic acid and have a pH up to 2.5 at room temperature." (We suppose that this recognition is made based on the characteristics "pH value: 1.5 to 2.5 at 20°C" and "PSS content: approximately 0.9% by weight" in the front page of the Product Information.) Further, the Examiner also says that "Example 1 of this application reports that the product Baytron P was dispersed in pure water so that the concentration thereof might be 2wt%. Based on this understanding, the Examiner recognizes that "As remarked above the concentration of organic acid polymer in Baytron P is already lower than 2 wt%. Thus dilution of organic acid in water is far away from providing a concentration of organic acid as required in claim 1 of the present application."

However, there are several types of Baytron P, and the Baytron P which is used in Example 1 is a product named "Baytron P VP CH8000". This fact is apparent from the description "It should be noted that the pH (at 25°C) of the dispersion liquid was 1.2." (see the second paragraph of page 27 of this application). As shown in the attached sheets (Product Information of Baytron P), in the case of Baytron P VP CH 8000, the solid content by weight is in the range of 2.5 to 3 wt% and pH at 20°C is in the range of 1.2 to 1.8 (see Table of page 2 of 2). Therefore, when Baytron P VP CH 8000 is used, that is, in the case of Example 1 of this application, the concentration of organic acid polymer (organic polymeric material of the present invention) can be lowered to 2 wt% without any problem. Therefore, we believe that there is no problem in dispersing Baytron P VP CH8000 so that the concentration thereof becomes 2 wt% while the pH of the dispersion liquid is 1.2. Therefore, we believe that the Examiner's opinion mentioned above is not correct.

(2) Further, in the item 1.3 of the written opinion, the Examiner says that there is a discrepancy between the descriptions of Example 2 and Claim 1 because Example 2 reports that "prior to the manufacture of the organic EL device, each of the dispersion liquid which had been preserved was concentrated so that the amount of PEDT/PSS

contained in the liquid was 2 wt%", which means that the concentration of the composition during preservation was lower than 2 %wt, whereas Claim 1 requires that the concentration of organic acid was 2 %wt.

In this regard, however, please note that Claim 1 does not define the value of the concentration of the composition during the preservation. Claim 1 merely defines that a pH (at 25°C) of the liquid which has been obtained by dissolving or dispersing the organic polymeric material in liquid so that a concentration thereof is 2 wt% is measured, and then the organic polymeric material is adjusted for preservation so that a pH (at 25°C) during the preservation becomes higher than the measured pH (at 25°C) and then the organic polymeric material be preserved at the higher pH value condition. Namely, the composition (organic polymeric material) is not preserved in a state that the concentration thereof is 2 wt%, but preserved at the higher pH value which is higher than the measured pH value. The concentration of the composition has to be 2 %wt when a pH is measured, but it does not have to be 2 %wt during the preservation. Therefore, the concentration of the composition during preservation can be lower than 2 %wt.

However, in order to avoid such a confusion, claim 1 may be amended so as to be read as follows.

"characterized in that when the organic polymeric material is to be preserved, the organic polymeric material is dissolved or discharged in the liquid so that a concentration thereof is 2 wt% and at that time a pH (at 25°C) of the thus obtained liquid is measured, and then the obtained liquid is adjusted so that its pH value becomes higher than the measure pH (at 25°C), and then the liquid be preserved under the higher pH value condition."